



# 29<sup>th</sup> and 33<sup>rd</sup> Streets Safety and Mobility Project

Existing Conditions | June 2024



CITY OF  
**Vancouver**  
WASHINGTON

## Introduction

The 29<sup>th</sup> & 33<sup>rd</sup> Streets Safety & Mobility Project aims to improve safety and mobility for all people using 29th Street between Kauffman Avenue and Neals Lane, and 33rd Street between Kauffman Avenue and Grand Boulevard (Figure 1). This document summarizes existing conditions in the study area and identifies opportunities and challenges for advancing project goals.

This project will identify both near- and long-term improvements. These will include:

- Improvements that can be implemented in coordination with planned pavement work in 2025, as well as other improvements that advance safety and mobility.
- Preferred roadway improvements in advance of future reconstruction of both Interstate 5 (I-5) overpasses through the Interstate Bridge Replacement (IBR) program.
- Investments made through other complete streets projects on Main Street and St. Johns Boulevard. Close coordination with both projects will provide a cohesive network for people walking and rolling.

## Study Area

29th Street and 33<sup>rd</sup> Street are east-west streets in central Vancouver, providing vital connections across I-5 and linking the neighborhoods of Carter Park, Lincoln, Shumway, Rose Village, and Fourth Plain Village. Both streets connect to major north-south routes, such as St. Johns Boulevard and Main Street, and provide direct connections to key destinations, including local parks, schools, and neighborhood-scale shops and services. The study area is shown in Figure 1.

Community resources within the project area include at least seven faith-based organizations, medical and rehabilitation centers, schools, and parks. C-TRAN Route #25 includes a bus stop near the project area at St. Johns Boulevard & 32nd Street. C-TRAN Routes #31 and #71 share a stop near E 33<sup>rd</sup> Street and Main Street.

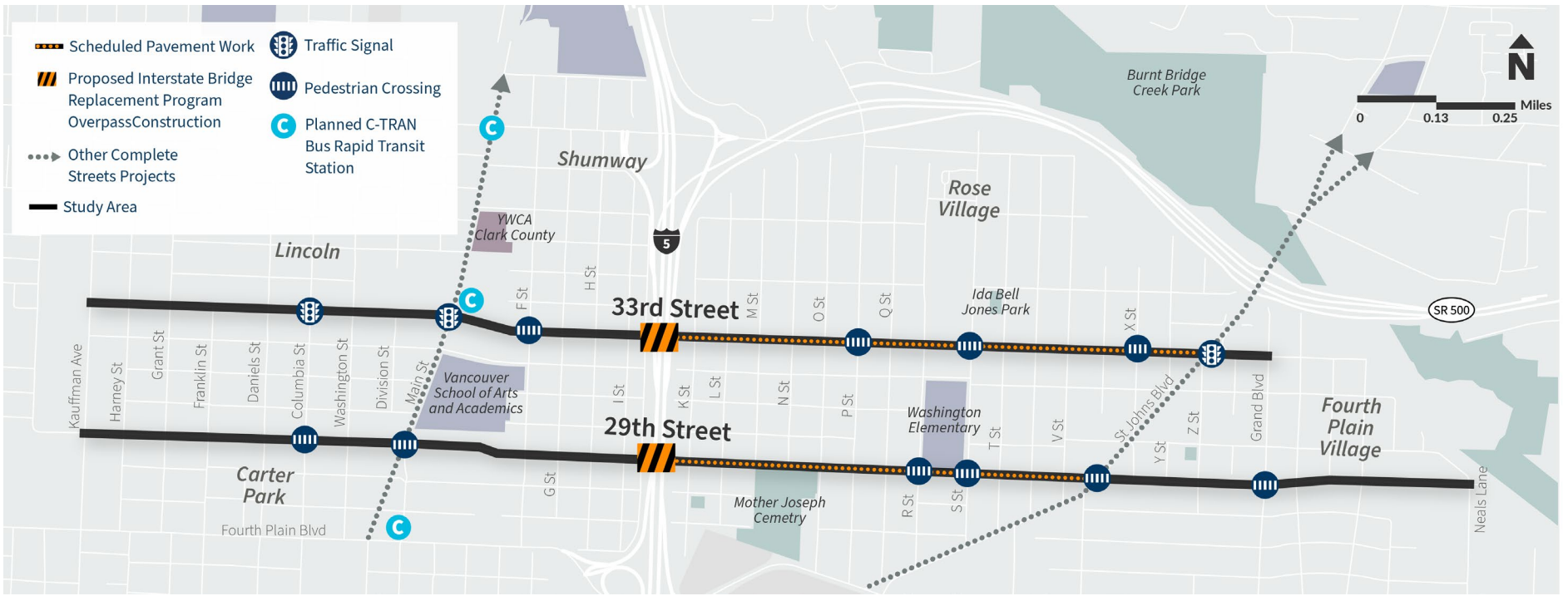


Figure 1. Project Area Map

## Project Goals

This project will advance the priorities of the City's 2024-2044 Transportation System Plan (adopted 2023). Specifically, the goals for this project include:



Improve **pedestrian safety** by adding/upgrading crossings, sidewalks, and curb ramp.



Improve **bike and small mobility connectivity and safety** by addressing network gaps and connecting low-stress facilities.



Ensure that **all members of the community**, regardless of race, income, or ability, have equal access to safe transportation options and infrastructure improvements.



Improve the condition of the roadway through **pavement work** to ensure a smoother and safer travel experience for all road users.

## Existing Conditions

Both 29<sup>th</sup> Street and 33<sup>rd</sup> Street connect residential areas with major transportation corridors, transit, local destinations, and activity centers.

Land use along both corridors is predominantly lower-density residential, creating opportunities for lower-stress neighborhood connections throughout most of the study area. Higher-density residential areas and limited commercial/mixed use development are in close proximity to Main Street, St. Johns Boulevard, and Grand Boulevard. Two schools, four neighborhood parks, at least seven places of worship, two health care facilities, and multiple community services are located between or adjacent to the corridors.

### 29th Street

29<sup>th</sup> Street is a local, neighborhood roadway. With a 25mph posted speed limit, no marked centerline, and on-street parking, this corridor provides a low-stress connection for people walking, rolling, bicycling, and using small mobility devices. However, many sidewalks are in poor condition, and east of St. Johns Boulevard many sidewalks are missing entirely. Further, crossings at major intersections including Main Street and St. Johns Boulevard have limited visibility. While the Main Street crossing has been improved with a rapid flashing beacon, the crossing of St. Johns Boulevard does not have any traffic control for vehicles traveling north-south. There is also limited lighting along the corridor, with lighting most frequently installed at intersections.

Traffic calming is present in some locations along the corridor. A raised crosswalk at S Street (Figure 2) supports access to Washington Elementary school, while speed bumps are present between St. Johns Boulevard and Grand Boulevard (Figure 3).

Washington Elementary School and Park is located between R Street and S Street, which is a key active transportation destination in the corridor. A school zone is present on 29<sup>th</sup> Street in front of the school, where the speed limit reduces to 20mph when children are present.



**Figure 2: A raised crosswalk at S Street helps slow traffic for students crossing 29th Street.**



**Figure 3: Speed bumps provide traffic calming on the eastern end of the study corridor.**

## 33rd Street

33<sup>rd</sup> Street experiences higher levels of activity, serving as a collector roadway for much of the study corridor. East of St. Johns Boulevard, 33<sup>rd</sup> Street transitions to an arterial roadway. The road features a marked centerline along the entire study corridor. West of Main Street, the speed limit is 25mph, and the adjacent land use is primarily lower-density residential. East of Main Street, the speed limit increases to 30mph, and the adjacent land use is more varied. 33<sup>rd</sup> Street's right-of-way widens at the I-5 overpass. Higher density residential areas are located near major intersections, such as Main Street. Commercial and community destinations are located throughout the corridor. On-street parking is available between Kauffman Avenue and N Street.

This corridor includes a combination of marked mobility lanes and sharrows to support bikes and small mobility users (Figure 4). Sidewalks are generally complete, although a large curb radius and undefined right-of-way exists at the intersection of K Street. Sidewalks tend to be detached with landscaping east of I-5. Signals at Columbia Street, Main Street, and St. Johns Boulevard enhance corridor connectivity. P Street and St. Johns Boulevard provide connections across SR-500. The east end of the corridor between N Street and St. Johns Boulevard includes several unsignalized crossing locations at P Street, S Street, and X Street. These crossings feature continental crosswalk markings, medians, and at the edge of the school zone on U Street, speed feedback signs.

Similar to 29<sup>th</sup> Street, lighting is limited along the corridor and present most frequently at intersections. However, additional lighting is present in some locations, such as along Carter Park or near commercial locations.

Existing conditions are summarized in Table 1, as well as shown in Figure 6.



**Figure 4:** At midblock crossing locations east of N Street, the mobility lane changes to shared lane markings (sharrows), creating an inconsistent facility for bikes and small mobility.



**Figure 5:** The I-5 Overpass is wide, with sharrows and attached sidewalks.

**Table 1: Existing Conditions Summary**

	29 <sup>th</sup> Street	33 <sup>rd</sup> Street
<b>Posted Speed Limit</b>	25 mph	25 mph west of Main Street 30 mph east of Main Street
<b>Number of Travel Lanes</b>	2 (one in each direction)	2 (one in each direction)
<b>Functional Classification</b>	<ul style="list-style-type: none"> <li>▪ Local west of Main Street</li> <li>▪ Collector between Main Street and St. Johns Boulevard</li> <li>▪ Local east of St. Johns Boulevard</li> </ul>	<ul style="list-style-type: none"> <li>▪ Collector west of St. Johns Boulevard</li> <li>▪ Minor Arterial between St. Johns Boulevard and Grand Boulevard</li> </ul>
<b>Existing Bicycle/Small Mobility Facilities</b>	None	<ul style="list-style-type: none"> <li>▪ None west of K Street</li> <li>▪ Sharrows between K Street (I-5 overpass) and N Street</li> <li>▪ Bike lanes and sharrows between N Street and Grand Boulevard</li> </ul>
<b>Existing Pedestrian Facilities</b>	<ul style="list-style-type: none"> <li>▪ 6 foot wide detached sidewalks on both sides of roadway between Kauffman Avenue and H Street, K Street and V Street</li> <li>▪ 6 foot wide attached sidewalks on both sides of roadway between H Street and K Street, V Street and X Street</li> <li>▪ Inconsistent sidewalks between X Street and Neals Lane</li> </ul>	<ul style="list-style-type: none"> <li>▪ 5 to 5.5 foot wide detached sidewalks on both sides of roadway between Kauffman Avenue and Main Street, M Street and Grand Boulevard</li> <li>▪ 6 foot wide attached sidewalks on both sides of roadway between Main Street and M Street</li> </ul>
<b>Existing Bicycle Level of Traffic Stress (LTS)<sup>1</sup></b>	<ul style="list-style-type: none"> <li>▪ LTS 2 between Main Street and St. Johns Boulevard</li> <li>▪ LTS 1 west of Main Street and east of St. Johns Boulevard</li> </ul>	<ul style="list-style-type: none"> <li>▪ LTS 3 between Main Street and St. Johns Boulevard, with intermittent LTS 2 segments.</li> <li>▪ LTS 2 west of Main Street</li> </ul>
<b>On-Street Parking</b>	<ul style="list-style-type: none"> <li>▪ Both sides of street for majority of corridor</li> </ul>	<ul style="list-style-type: none"> <li>▪ Both sides of street between Kauffman Avenue and N Street</li> </ul>

<sup>1</sup> Level of Traffic Stress (LTS) is a framework for evaluating the expected safety and comfort of roadways. Using a 4-point system, LTS provides information about the quality of a route and corresponds with who may use that route. LTS 1 corridors are generally suitable for all ages and abilities, while LTS 4 corridors are high stress and not typically suitable for bicycle travel. While most commonly used to describe bicycle travel, LTS can also describe pedestrian safety and comfort.

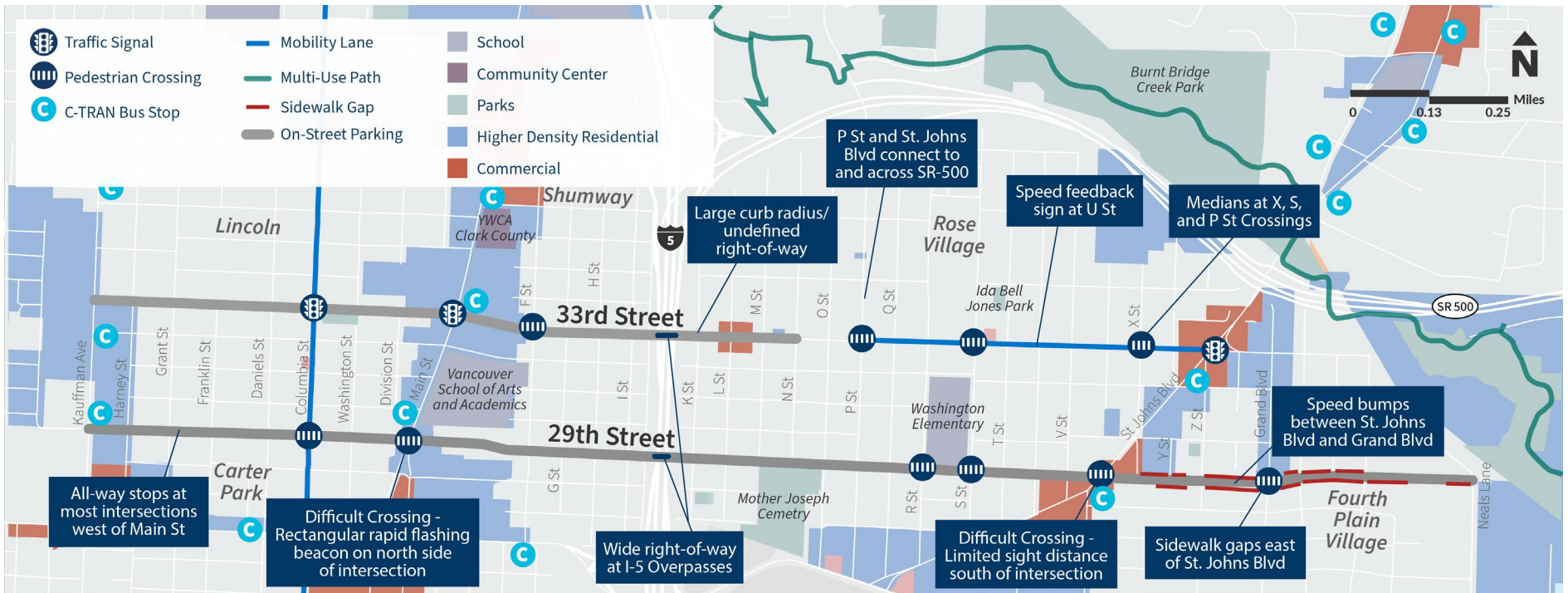


Figure 6: Existing Conditions Summary



# Proposed Transportation Network

Both corridors are identified in the City's Transportation System Plan (TSP) as priority bicycle/small mobility and pedestrian routes (Figure 7). Recommended treatments vary by context but generally emphasize safety, comfort, and travel priority for active modes.

Additionally, both corridors offer opportunities to connect to north-south pedestrian, bicycle and small mobility, and transit corridors that expand mobility options beyond the study area and improve connectivity within the area's neighborhoods. Main Street is identified as a high-capacity transit corridor, and St. Johns Boulevard is proposed as a priority transit corridor.

Project recommendations should identify opportunities to provide seamless, comfortable connections between existing and future active transportation routes. This may include improved crossings, wayfinding to support navigation, or consistency in treatments to increase predictability.

**Priority Pedestrian Corridors** include designated spaces for people to walk or roll. Treatment varies by roadway context, but typically includes complete sidewalks, curb ramps, and buffer space between the sidewalk and roadway.

**Neighborhood Greenways** are low-stress neighborhood roadways with improvements that calm traffic, divert vehicle traffic to other corridors, support navigation along the route, and prioritize bicycle and pedestrian movement.

**Mobility Lanes** are in street mobility facilities that designate space for people biking or using small mobility devices. The lane may be marked with a painted line, painted or physical buffer, or vertical separation.



Figure 7: TSP-Identified Priority Active Transportation Networks

# Community Characteristics

The study area intersects five neighborhoods: Lincoln, Carter Park, Shumway, Rose Village, and Fourth Plain Village. These neighborhoods are home to more than 13,000 people.

The City's Equity Index provides insight into areas where people may be more likely to rely on walking, rolling, biking, small mobility, or transit. As shown in Figure 8, areas east of I-5, which include the Rose Village and Fourth Plain Village neighborhoods, generally score high or highest on the index, while areas west of I-5 score average-to-low. A more detailed review of area demographics can be found in the Appendix and in the Community Engagement Plan.

Understanding community characteristics will not only inform the community engagement approach for the project but should also be considered during project evaluation/prioritization.

## Notable demographic findings include:

- Communities of color are more likely to live and/or attend a K-12 school in neighborhoods east of I-5.
- 20% of the population is under the age of 18; 12% are over the age of 65.
- When compared to the rest of the City, County, and State, the study area has a larger Hispanic/Latino population (22%), a higher percentage of low-income residents (32%), and a higher percentage of no-vehicle households (9%).
- Spanish is the only language other than English spoken by more than 5% of the population within the project area.
- The greatest concentration of renters within the project area live in the Fourth Plain Village neighborhood.
- Neighborhoods bordering I-5 (Shumway and Rose Village) have the greatest concentration of residents experiencing disabilities.



**Figure 8: Vancouver Equity Index**

Source: City of Vancouver Open Data Hub, 2023

## Transportation Safety

Review of the most recent five years of crash data<sup>2</sup> provides insight into key safety concerns in the study area, including both where crashes are occurring most often as well as factors influencing reported crashes. Locations with greater crash frequency and/or greater crash severity. As well as common crash characteristics, such as high incidences of intersection-related or turn-related crashes, should inform project recommendations across the study area.

A total of 121 crashes were reported on both corridors between 2018 and 2022. Of these crashes, 73 resulted in property damage only, while the remaining 48 resulted in possible or suspected injuries. There were no fatalities in the study corridors. Crash hot spots and bicycle and pedestrian-involved injury crashes are shown in Figure 9. Crashes occurred more frequently on 33<sup>rd</sup> Street, including the areas between Main Street and I-5 as well as immediately west of St. Johns Boulevard. P Street and 33<sup>rd</sup> Street also experience a high incidence of crashes. Reported crashes on 29<sup>th</sup> Street occurred more frequently between Main Street and St. Johns Boulevard.

Nearly 40% of all crashes resulted in a suspected minor injury or possible injury. Two crashes resulted in a suspected serious injury, one involving a pedestrian at 33<sup>rd</sup> Street and X Street and one involving a bicyclist at 33<sup>rd</sup> Street and Grand Avenue. No suspected serious injury crashes involved only motor vehicles. A more detailed summary of reported crash data is included in the Appendix.

### Key findings include:

- 7% of all crashes involved someone walking or biking.
- 70% of all crashes were intersection related.
- 15% of crashes involved failing to grant right-of-way.
- 10% of crashes involved disregarding signs and signals.
- 22% of crashes involved distracted driving.

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<sup>2</sup> WSDOT, 2018-2022

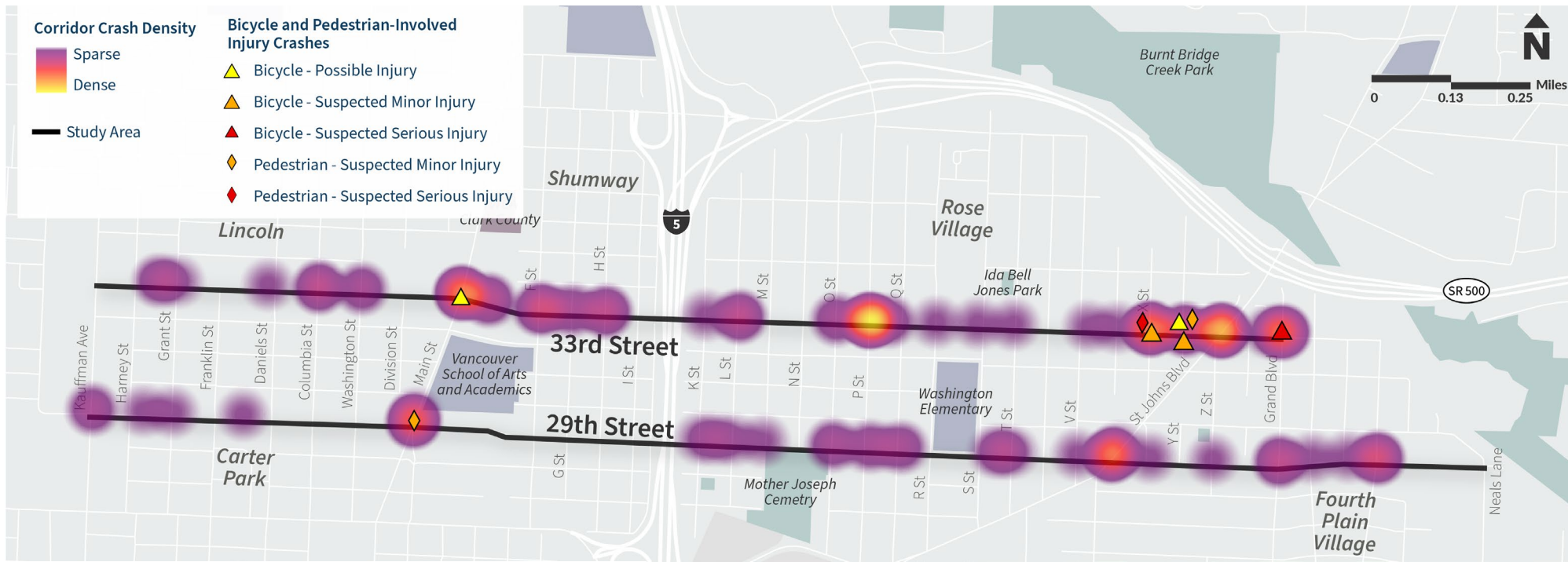


Figure 9: Corridor Crash Density (2018-2022)

## Traffic Counts

Traffic counts and speed data were collected by the City of Vancouver at locations along both 29<sup>th</sup> Street and 33<sup>rd</sup> Street; the complete list of locations is included in Table 2.

Data was collected on 29<sup>th</sup> Street between April 23 and April 28, 2024; and on 33<sup>rd</sup> Street between April 30 and May 5, 2024. While Turning Movement Counts are available at select locations in the study area from the Southwest Washington Regional Transportation Council, many counts are out of date by several years or more. The project team will review available data on a case-by-case basis as needed through future phases of the project.

### 29<sup>th</sup> Street

Traffic volumes are generally low on 29<sup>th</sup> Street, with the lowest volumes west of Columbia Street. Volumes increase traveling east, with the highest volumes of 614 vehicles per day collected near Washington Elementary School. However, current traffic volumes are consistent with recommended conditions for neighborhood greenways, which typically specify around 1,500 vehicles per day as the maximum preferred volume.<sup>3</sup> The observed 85<sup>th</sup> percentile speed was generally around 24mph, which is just under the current 25mph speed limit. Traffic calming measures may be considered to improve safety and comfort for people walking and bicycling.

### 33<sup>rd</sup> Street

Similar to 29<sup>th</sup> Street, traffic volumes are higher in the eastern areas of 33<sup>rd</sup> Street. Volumes were lowest west of Columbia Street; locations near St. Johns and Grand Boulevards experienced substantially higher volumes. This data will help guide selection of facility type and will inform appropriate traffic calming measures in the corridor. The observed 85<sup>th</sup> percentile speed was highest in the central area of the corridor, exceeding the current 30mph speed limit. The western and eastern extents of the corridor experienced lower speeds.

<sup>3</sup> NACTO *Urban Bikeway Design Guide*. <https://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/volume-management/>

**Table 2. Street Volumes and Speed**

Corridor	Location	ADT	85 <sup>th</sup> Percentile Speed
29 <sup>th</sup> Street	Between Grant Street and Harney Street	288	20 mph
	Between H Street and I Street	477	24 mph
	Between R Street and S Street	614	24 mph
	Between Watson Avenue and Fairmont Avenue	558	24 mph
33 <sup>rd</sup> Street	Franklin Street	1,256	26 mph
	K Street	3,342	33 mph
	Between R Street and S Street	3,904	32 mph
	Between St. Johns Boulevard and Grand Boulevard	8,414	24 mph

## Parking Utilization

A parking utilization study evaluated parking use at selected locations in the study area:

- 29<sup>th</sup> Street between Main Street and Grand Boulevard, from 4:00 to 9:00 PM.
- 33<sup>rd</sup> Street between Kauffman Avenue and N Street, from 8:00 to 11:00 AM and 4:00 to 9:00 PM.

Observations completed during the morning hours (8:00 to 11:00 AM) aim to understand parking uses associated with commercial areas, services, and similar destinations. Observations completed during the afternoon and evening hours aim to assess parking demand associated with residential uses. Overall, this study found that on-street parking is not highly utilized in the selected area. Additional detail utilization by block can be found in the Appendix.

Figure 10 displays the average utilization per block. Despite generally low utilization across the corridor ranging from 0 – 35%, several locations experienced comparatively higher rates of use (over 50%) during limited times.

Key findings regarding blocks with higher utilization include:

- 54% average utilization on 29<sup>th</sup> Street from G Street to H Street.
- 66% average utilization on 29<sup>th</sup> Street from S Street to T Street.
- 60% average utilization on 29<sup>th</sup> Street from St. Johns Boulevard to X Street.
- 70% average utilization on 33<sup>rd</sup> Street from F Street to H Street.
- 56% AM utilization and 67% PM utilization on 33<sup>rd</sup> Street from L Street to M Street.
- 51% average utilization between Harney Street and Grant Street on the south side of the 33<sup>rd</sup> Street.

Blocks with limited periods of higher utilization may require additional evaluation and outreach to surrounding destinations to understand parking needs and opportunities.

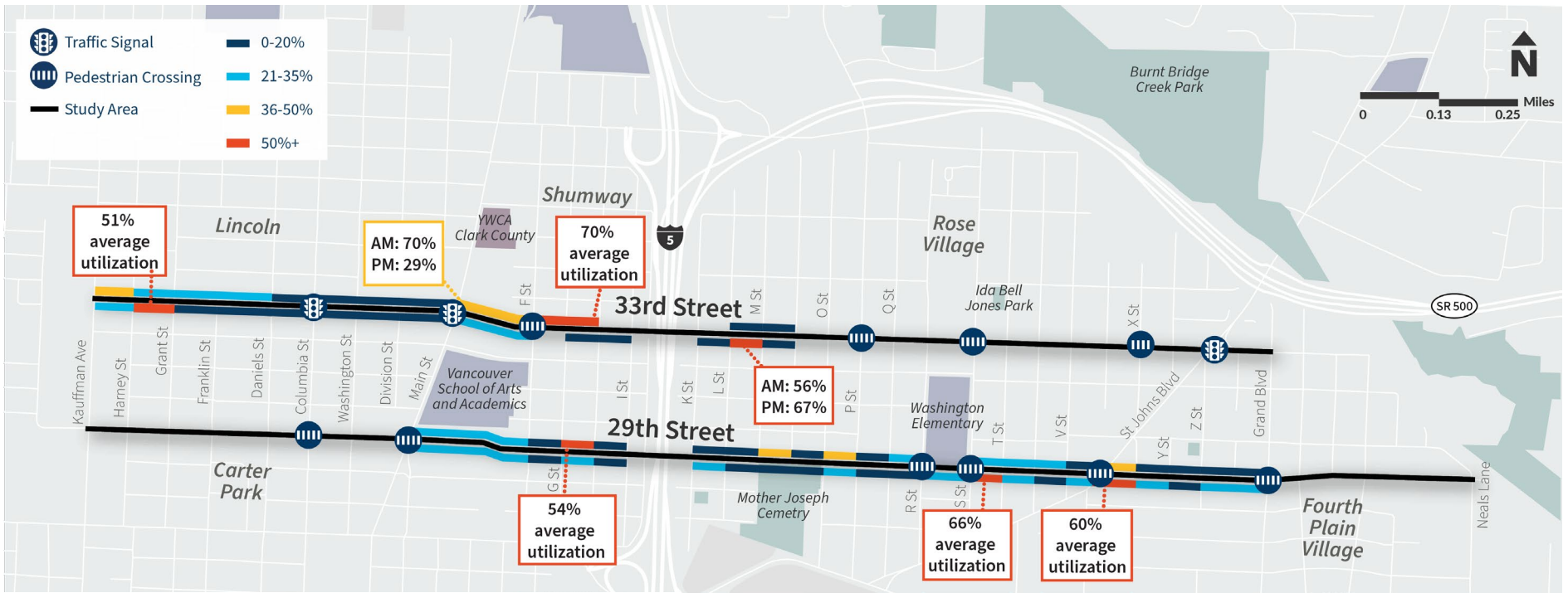


Figure 10: Parking Utilization Study Summary

## Issues and Needs

Review of available data and on-site review of conditions reveals several corridor needs as well as opportunities to advance TSP-identified priorities. A summary of these issues and the associated opportunities are outlined in Table 3 below. This information is also summarized in Figure 11.

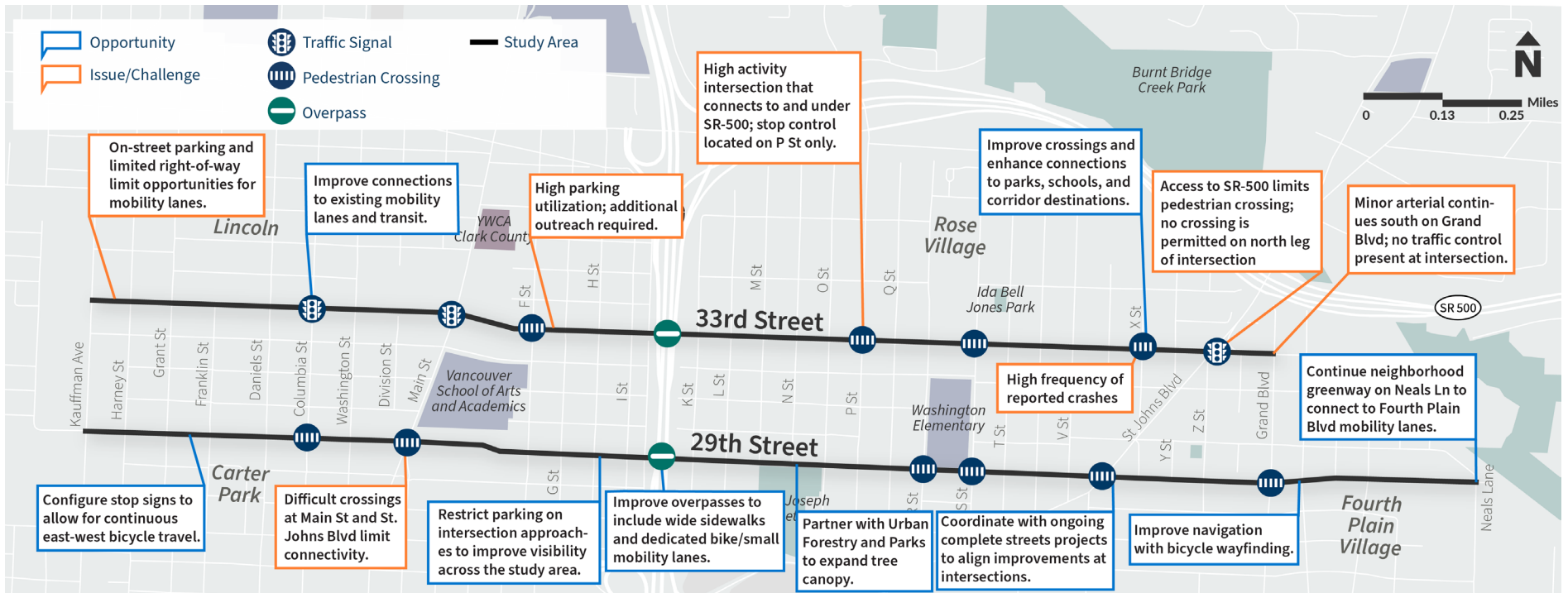
**Table 3: Summary of Corridor Issues and Opportunities**

Issue	Opportunity
The existing pedestrian, bicycle, and small mobility network is inconsistent or incomplete. Sidewalks are missing in some locations and in poor condition along many areas of the corridor	Identify pedestrian, bicycle, and small mobility improvements recommended in the TSP to create a more complete and connected active transportation network. Strengthen connections to existing active transportation facilities, transit, parks, schools, and community destinations (Figure 15). Enhance corridor safety and visibility by daylighting intersections. Improve navigation with bicycle wayfinding and reconfigure stop signs to allow for continuous east-west bicycle travel.
Difficult crossings at St. Johns Boulevard and Main Street limit network comfort, safety, and connectivity. Crossing improvements will be determined in coordination with ongoing projects along both of these corridors.	Coordinate with ongoing Complete Streets projects on Main Street (Figure 14) and St. Johns Boulevard so that recommended solutions are consistent and create a safer and more comfortable network for all modes.
I-5 overpasses have wide rights-of-way, narrow sidewalks, and no dedicated bike and small mobility facilities.	Improve overpasses to include wide sidewalks and dedicated bike/small mobility lanes. Identify preferred cross section for future bridge reconstruction with the Interstate Bridge Replacement Program.
On-street parking constrains available right-of-way for mobility lane improvements and impacts visibility at intersections.	Reallocate roadway space and daylight intersections to improve safety for all modes.
On-street parking along 33 <sup>rd</sup> Street limits available right-of-way for implementing bicycle and small mobility facilities. Most areas with on-street parking are not highly utilized.	Reallocate available right-of-way to implement bicycle and small mobility facilities. Limited areas with high utilization will require engagement with the community to determine most appropriate solution to address parking and mobility needs.
Crash data (2018-2022) shows higher frequencies of crashes on some corridor segments (Figure 13). Locations with high crash frequencies on 33 <sup>e</sup> Street include X Street, P Street, St. Johns Boulevard, and Main Street. Crash frequencies on 29 <sup>th</sup> Street are highest at Main Street and St. Johns Boulevard. Many crashes are associated with turning movements and intersections.	Identify safety improvements that can be incorporated into the project both near- and long-term. Explore options for revising stop control at intersections such as 33 <sup>rd</sup> Street and P Street, while improving crossings and circulation at locations such as 33 <sup>rd</sup> Street and X Street or 33 <sup>rd</sup> Street and Grand Boulevard.



**Other Opportunities:**

- The corridors connect to many schools, parks, places of worship, and other community resources. There are opportunities to improve access to these destinations for people walking, rolling, bicycling, or using small mobility.
- The project area includes neighborhoods with a history of advocating for street murals and traffic calming projects (Figure 12). There are opportunities to engage residents and build on this history.
- Tree canopy is limited throughout the corridor. Partnering with Urban Forestry and Parks may offer opportunities to expand the tree canopy.



**Figure 11: Study Area Issues and Opportunities**



Figure 12: 33<sup>rd</sup> Street features community intersection paintings at K Street and R Street, but both are fading.



Figure 13: The eastern end of the study area includes a transition from 33<sup>rd</sup> Street to Grand Boulevard for the minor arterial, giving priority for traffic along this route. This intersection was the location of a suspected serious injury bicycle crash.



Figure 14: At 29<sup>th</sup> Street and Main Street, a continental crosswalk and rectangular rapid flashing beacon (RRFB) are located on the north intersection leg. Coordination with the Upper Main Street project will help identify intersection approach options along 29<sup>th</sup> Street.



Figure 15: The intersections on 29<sup>th</sup> and 33<sup>rd</sup> Streets with Columbia Street create an opportunity to seamlessly connect with existing low-stress network routes.

# Evaluation Criteria

The evaluation criteria shown in Table 4 will be used to assess proposed safety and mobility projects on 29<sup>th</sup> Street and 33<sup>rd</sup> Street. These criteria provide a framework for evaluating alternatives and identifying priorities that are consistent with project goals. The criteria will be measured through a combination of quantitative and qualitative evaluation, relying on data captured in the TSP and this existing conditions memorandum where feasible.

**Table 4. Draft Evaluation Criteria**

Criterion	Measure	How will we measure it?
Safety	<ul style="list-style-type: none"> <li>Does the project improve pedestrian, bicycle, and small mobility safety?</li> <li>Does the project address high-risk areas identified through the safety analysis?</li> </ul>	<ul style="list-style-type: none"> <li>Project improves an area with a history of high frequency crashes, including bicycle/pedestrian crashes.</li> <li>Project prioritizes improvements that increase active transportation safety/comfort, such as traffic calming, increased visibility at crossings, and improved sidewalks and mobility lanes.</li> </ul>
Connectivity	<ul style="list-style-type: none"> <li>Does the project enhance connectivity for people walking, using a mobility device, biking, and using transit?</li> </ul>	<ul style="list-style-type: none"> <li>Project improves connectivity to active transportation facilities and key community destinations</li> </ul>
Equity	<ul style="list-style-type: none"> <li>Does the project address transportation disparities among equity populations?</li> </ul>	<ul style="list-style-type: none"> <li>Project includes provisions for accessible infrastructure and accommodations for people with disabilities.</li> <li>Project process includes engagement activities with communities experiencing transportation disparities and/or historically under-represented in the engagement process.</li> </ul>
Consistency with TSP	<ul style="list-style-type: none"> <li>Is the proposed improvement consistent with the vision identified in the City's TSP?</li> </ul>	<ul style="list-style-type: none"> <li>Project aligns with the vision, policies, goals, and recommended projects in the TSP, including the TSP modal networks.</li> </ul>

## Next Steps

During Summer 2024, the project team will connect with community members, area businesses and organizations, and other people using the 29<sup>th</sup> Street and 33<sup>rd</sup> Street corridors to share more about the project, learn how people are using the corridor today, and confirm the issues and needs across the study area. The information captured in this existing conditions review combined with public feedback will inform draft improvement concepts for the corridor.

# Appendix

The following pages provide additional information, data, and analysis to support the existing conditions document. The Appendix includes the following sections:

- Demographics and Community Characteristics
- Safety Analysis
- Parking Utilization
- TSP-Proposed Projects and Policies

## Demographics

The study area is comprised of Census Tracts 417, 418, 419, and 421. When compared to the City, County, and State, the study area tends to have a larger Hispanic/Latino population (22%), a higher percentage of low-income residents (32%), a lower percentage of people under 18 (20%) and people over 65 (12%), and a higher percentage of households that don't own vehicles (9%).

Table 5 provides an overview of community characteristics within the study area. The Community Engagement Plan for this project includes a more detailed demographic review, including a breakdown of demographics by study area neighborhood.

**Table 5: Study Area Community Characteristics**

	Study Area	City of Vancouver	Clark County	Washington
<b>Population</b>	13,575	190,700	504,091	7,688,549
<b>Race and Ethnicity</b>				
American Indian and Alaska Native alone	1%	<1%	<1%	1%
Asian alone	3%	5%	5%	9%
Black or African American alone	3%	3%	2%	4%
Hispanic or Latino alone	22%	15%	11%	13%
Native Hawaiian and Other Pacific Islander alone	2%	2%	1%	1%
White alone	63%	68%	75%	66%
Other race alone	<1%	<1%	<1%	<1%
Two or more races	6%	7%	6%	--
<b>Limited English-Proficiency Households</b>	4%	4%	3%	4%
<b>Income Characteristics</b>				
Low Income Population <sup>1</sup>	32%	28%	22%	23%
Families Below Federal Poverty Level	13%	8%	6%	6%
<b>Age</b>				
Youth (under 18)	20%	22%	23%	22%
Older adults (65 years+)	12%	16%	16%	16%
<b>Persons with Disabilities</b>	15%	15%	13%	13%
<b>No Vehicle Households</b>	9%	7%	5%	7%

<sup>1</sup> Low Income Population is defined as 200% or less of the Federal Poverty Level

Source: U.S. Census Bureau, American Community Survey: 5-Year Estimates 2022, block group level

## Safety Analysis

The safety analysis reviewed crash data representing the years 2018-2022 (Table 6 and Table 7). The project team filtered city-wide crash data to include only those crashes that occurred on the study corridors. Additionally, crashes that occurred on intersecting streets and identified as intersection related were included in the analysis.

Review of the safety data included exploration of crash frequency, crash severity, modes involved, and contributing factors identified in the data. The following tables summarize the data review by corridor.

**Table 6: 33rd Street Crash Summary (2018-2022)**

Category	Factors	Number of Crashes	Percentage of Total Crashes
Crash Severity	No Apparent Injury	41	52.6%
	Possible Injury	18	23.1%
	Suspected Minor Injury	12	15.4%
	Suspected Serious Injury	2	2.6%
	Unknown	5	6.4%
Modes	Pedestrian-Involved	2	2.6%
	Bicycle-Involved	5	6.4%
	Motor Vehicle Only	71	91.0%
Crash Characteristics/ Location	Associated with Turning Movement	20	25.6%
	Going Straight Ahead	47	60.3%
	Intersection Related	56	71.8%
Lighting	Dark - No Street Lights	2	2.6%
	Dark - Street Lights On	18	23.1%
	Dark - Unknown Lighting	2	2.6%
	Dawn	2	2.6%
	Dusk	2	2.6%
	Unknown	1	1.3%
	Daylight	51	65.4%
Contributing Factors	Distracted Driving	20	25.6%
	Did Not Grant RW to Vehicle	11	14.1%
	Other Contributing Circumstance Not Listed	12	15.4%
	Under Influence of Alcohol	6	7.7%
	Disregard of Traffic Sign/Signals	6	7.7%

**Table 7: 29th Street Crash Summary (2018-2022)**

Category	Factors	Number of Crashes	Percentage of Total Crashes
Crash Severity	No Apparent Injury	24	55.8%
	Possible Injury	10	23.3%
	Suspected Minor Injury	6	14.0%
	Suspected Serious Injury	0	0%
	Unknown	3	7.0%
Modes	Pedestrian-Involved	1	2.3%
	Bicycle-Involved	0	0%
	Motor Vehicle Only	42	97.6%
Crash Characteristics/ Location	Associated with Turning Movement	10	23.2%
	Going Straight Ahead	27	62.8%
	Intersection Related	29	67.4%
Lighting	Dark – No Street Lights	1	2.3%
	Dark – Street Lights On	12	27.9%
	Daylight	30	69.8%
Contributing Factors	Distracted Driving	7	16.3%
	Did Not Grant RW to Vehicle	7	16.3%
	Other Contributing Circumstance Not Listed	7	16.3%
	Improper Turn/Merge	4	9.3%
	Exceeding Stated Speed Limit	3	7.0%



## Parking Utilization

The project team conducted a parking utilization study on April 9, 2024. The tables that follow summarize the information collected during this study. The study included the following locations and times:

- 29th: Main Street to Grand Boulevard, each hour between 4:00PM and 9:00 PM.
- 33rd: Main Street to N Street, each hour between 8:00 AM and 11:00 AM, and between 4:00 PM and 9:00 PM
- Additionally, 33<sup>rd</sup> Street between Kauffman Avenue and Main Street was observed on May 15, 2024. Counts were taken each hour between 8:00 AM and 11:00 AM, and between 4:00 PM and 9:00 PM

Possible parking spaces available were determined based on block length measurements taken from an aerial. This length was divided by the length of a parking space based on local standards, with consideration for driveways and alleys.

**Table 8. 33<sup>rd</sup> Street AM Parking Utilization – North Side of Street**

Block	Possible Spaces	8-9 AM	9-10 AM	10-11 AM	Average Utilization Rate (5%)
Kauffman to Harney	10	0.40	0.40	0.40	0.40
Harney to Grant	9	0.33	0.22	0.33	0.30
Grant to Franklin	11	0.27	0.27	0.09	0.21
Franklin to Daniels	16	0.31	0.25	0.25	0.27
Daniels to Columbia	11	0.00	0.00	0.00	0.00
Columbia to Washington	10	0.10	0.10	0.10	0.10
Washington to Division	13	0.08	0.08	0.08	0.08
Division to Main	5	0.00	0.00	0.00	0.00
Main to F	11	0.55	0.82	0.73	0.70
F to G	3	0.67	0.67	0.67	0.67
G to H	9	0.78	0.78	0.78	0.78
H to I	7	0	0	0	0
I to K	0	0	0	0	0
K to L	10	0	0	0	0
L to M	9	0.11	0.11	0.22	0.15
M to N	10	0.10	0.10	0.10	0.10

**Table 9. 33<sup>rd</sup> Street AM Parking Utilization – South Side of Street**

Block	Possible Space	8-9 AM	9-10 AM	10-11 AM	Average Utilization Rate (34%)
Kauffman to Harney	7	0.14	0.14	0.29	0.19
Harney to Grant	11	0.36	0.45	0.45	0.42
Grant to Franklin	10	0.10	0.10	0.10	0.10
Franklin to Daniels	16	0.06	0.06	0.06	0.06
Daniels to Columbia	11	0.00	0.00	0.00	0.00
Columbia to Washington	11	0.00	0.00	0.27	0.09
Washington to Division	15	0.13	0.13	0.20	0.16
Division to Main	12	0.00	0.00	0.00	0.00
Main to F	8	0.13	0.38	0.50	0.33
F to G	4	0	0	0	0
G to H	7	0.14	0.14	0.14	0.14
H to I	7	0	0	0	0
I to K	0	0	0	0	0
K to L	5	0	0	0	0
L to M	6	0.67	0.50	0.50	0.56
M to N	9	0	0	0	0

**Table 10. 33<sup>rd</sup> Street PM Parking Utilization – North Side of Street**

Block	Possible Spaces	4-5 PM	5-6 PM	6-7 PM	7-8 PM	8-9 PM	Average Utilization Rate
Kauffman to Harney	10	0.40	0.60	0.40	0.40	0.40	0.44
Harney to Grant	9	0.33	0.22	0.33	0.33	0.33	0.31
Grant to Franklin	11	0.36	0.27	0.27	0.27	0.27	0.29
Franklin to Daniels	16	0.25	0.19	0.19	0.25	0.25	0.23
Daniels to Columbia	11	0.00	0.00	0.00	0.00	0.00	0.00
Columbia to Washington	10	0.10	0.20	0.20	0.30	0.30	0.22
Washington to Division	13	0.08	0.00	0.00	0.00	0.00	0.02
Division to Main	5	0.00	0.00	0.00	0.00	0.00	0.00
Main to F	11	0.45	0.36	0.27	0.18	0.18	0.29
F to G	3	0.67	0.67	0.67	0.67	0.67	0.67
G to H	9	0.67	0.67	0.78	0.78	0.67	0.71
H to I	7	0	0	0	0	0	0
I to K	0	0	0	0	0	0	0
K to L	10	0	0	0	0	0	0
L to M	9	0.11	0.11	0	0	0	0.04
M to N	10	0.10	0.10	0.30	0.20	0.20	0.18

**Table 11. 33<sup>rd</sup> Street PM Parking Utilization – South Side of Street**

Block	Possible Spaces	4-5 PM	5-6 PM	6-7 PM	7-8 PM	8-9 PM	Average Utilization Rate
Kauffman to Harney	7	0.29	0.29	0.43	0.29	0.43	0.34
Harney to Grant	11	0.36	0.55	0.64	0.73	0.73	0.60
Grant to Franklin	10	0.00	0.10	0.00	0.00	0.00	0.02
Franklin to Daniels	16	0.13	0.06	0.13	0.13	0.13	0.11
Daniels to Columbia	11	0.00	0.00	0.00	0.00	0.00	0.00
Columbia to Washington	11	0.18	0.27	0.00	0.00	0.00	0.09
Washington to Division	15	0.20	0.13	0.20	0.20	0.20	0.19
Main to F	8	0.25	0.25	0.38	0.25	0.25	0.28
F to G	4	0	0	0	0	0	0
G to H	7	0.14	0	0.14	0.14	0.14	0.11
H to I	7	0.14	0.14	0.14	0.14	0.14	0.14
I to K	0	0	0	0	0	0	0
K to L	5	0	0	0.20	0.20	0.20	0.12
L to M	6	0.67	0.67	0.67	0.67	0.67	0.67
M to N	9	0	0	0.22	0	0	0.04

**Table 12. 29<sup>th</sup> Street PM Parking Utilization – North Side of Street**

Block	Possible Space	4-5 PM	5-6 PM	6-7 PM	7-8 PM	8-9 PM	Average Utilization Rate (23%)
Main to F	30	0.3	0.37	0.40	0.33	0.37	0.35
F to G	7	0	0.14	0.14	0.14	0.14	0.11
G to H	7	0.29	0.29	0.71	0.71	0.71	0.54
H to I	9	0.11	0.11	0.11	0.11	0.11	0.11
I to K	0	0	0	0	0	0	0
K to L	9	0	0.11	0.11	0.11	0.11	0.09
L to M	8	0	0	0	0	0.13	0.03
M to N	8	0.25	0.25	0.50	0.63	0.63	0.45
N to O	8	0	0	0.13	0.13	0.13	0.08
O to P	10	0.40	0.40	0.50	0.50	0.50	0.46
P to Q	8	0	0.25	0.13	0.13	0.13	0.13
Q to R	9	0.22	0.22	0.22	0.22	0.22	0.22
R to S	17	0	0	0	0	0	0
S to T	7	0.29	0.29	0.29	0.29	0.29	0.29
T to U	8	0.25	0.25	0.25	0.25	0.25	0.25
U to V	7	0	0	0.14	0.14	0.14	0.09
V to St. Johns	7	0.29	0.29	0.43	0.43	0.43	0.37
St. Johns to X	5	0.20	0.60	0.20	0.40	0.60	0.4
X to Y	10	0.20	0.20	0.20	0.20	0.20	0.20
Y to Z	10	0.10	0.10	0.10	0.10	0.10	0.10
Z to Grand	18	0.28	0.17	0.11	0.17	0.17	0.18

**Table 13. 29<sup>th</sup> Street PM Parking Utilization – South Side of Street**

Block	Possible Spaces	4-5 PM	5-6 PM	6-7 PM	7-8 PM	8-9 PM	Average Utilization Rate (27%)
Main to F	26	0.42	0.27	0.27	0.23	0.19	0.28
F to G	8	0	0.13	0	0.13	0.13	0.08
G to H	9	0.33	0.33	0.22	0.22	0.22	0.27
H to I	8	0	0	0.13	0.13	0.13	0.08
I to K	0	0	0	0	0	0	0
K to L	8	0.25	0.25	0.25	0.25	0.25	0.25
L to M	9	0.11	0.11	0.11	0.22	0.22	0.16
M to N	11	0	0	0	0	0	0
N to O	11	0	0	0	0	0	0
O to P	7	0.14	0.14	0.14	0.29	0.43	0.23
P to Q	9	0	0	0.11	0.22	0.22	0.11
Q to R	8	0	0	0	0	0	0
R to S	10	0.20	0.40	0.30	0.20	0.30	0.28
S to T	7	0.71	0.57	0.57	0.71	0.71	0.66
T to U	8	0.25	0.38	0.25	0.38	0.38	0.33
U to V	9	0	0	0	0	0	0
V to St. Johns	3	0	0.33	0.33	0.33	0.33	0.27
St. Johns to X	8	0.63	0.63	0.50	0.63	0.63	0.60
X to Y	6	0	0	0	0	0	0
Y to Z	8	0.13	0.13	0.25	0.13	0.13	0.15
Z to Grand	21	0.24	0.29	0.29	0.29	0.33	0.29

## Traffic Counts

Traffic counts were collected by the City of Vancouver at locations along both 29<sup>th</sup> Street and 33<sup>rd</sup> Street; the complete list of locations is included in Table 14. Data gathered included volume and speeds; turning movement counts were not included. Data was collected on 29<sup>th</sup> Street between April 23 and April 28, 2024; data was collected on 33<sup>rd</sup> Street between April 30 and May 5, 2024.

While Turning Movement Counts are available at select locations in the study area from Southwest Washington Regional Transportation Council, many counts are out of date by several years or more. The project team will review available data on a case-by-case basis as needed through future phases of the project.

**Table 14. Street Volumes and Speed**

Corridor	Location	ADT	85 <sup>th</sup> Percentile Speed
29 <sup>th</sup> Street	Between Grant and Harvey	288	20 mph
	Between R Street and S Street	614	24 mph
	Between H Street and I Street	477	24 mph
	Between Watson and Fairmont	558	24 mph
33 <sup>rd</sup> Street	Franklin Street	1,256	26 mph
	K Street	3,342	33 mph
	Between R Street and S Street	3,904	32 mph
	Between St. Johns Boulevard and Grand Boulevard	8,414	24 mph

## TSP-Proposed Projects and Policies

The City of Vancouver Transportation System Plan (TSP) identified projects to implement improved walking, bicycling, and small mobility networks. The following TSP projects are in the study area:

### Pedestrian Project

- Broadway Street: Add crossings from W 29th Street to E 6th Street.
- E 29th Street/Neals Lane: Fill in missing sidewalk from Watson Avenue to Fourth Plain Boulevard.

### Small Mobility and Pedestrian Project

- Franklin Street: Neighborhood greenway treatments from W 8th Street to W 33rd Street.
- Main Street: add crossings and missing sidewalks from E 29th Street to NE Ross Street. PML from E 39th Street to Discovery Trail.
- K/V/E 37th Streets: Neighborhood greenway treatments with connection points to 29th Street.
- N Street: Neighborhood greenway treatments from E 29th Street to just south of SR-500.
- Norris Road/E 17th Street: Neighborhood greenway treatments from 29th Street to south of E 18th Street.

### Small Mobility Project

- W 33rd Street: Mobility lane from Kauffman Avenue to Main Street.
- E 33rd Street: Protected mobility lane from Main Street to Grand Boulevard.
- E 29th Street: Neighborhood greenway treatments from Kauffman Avenue to Neals Lane.

### Policies and Programs

The list below summarizes relevant policies outlined in TSP Chapter 4: Big Ideas (pages 30 through 41). Each bullet point below describes a Key Policy, which includes several policies and programs that support it.

- **TN1 - 15-Minute Neighborhoods:** Make walking, rolling, and small mobility convenient through mixed-use zoning and investment in complete corridors to serve all travel modes. Foster redevelopment within strategic development nodes to support 15-minute neighborhoods. This policy includes traffic calming, Safe Routes to School programs, and neighborhood pathways.
- **TN2 - Climate Corridors:** Develop climate corridors to mitigate climate impacts through greener streets, street tree canopies, natural plantings for stormwater management, linear parks, and other climate resilient techniques. Support policies include partnering with Urban Forest and Parks to increase street canopy.
- **CC1 - Complete Corridors:** Create complete corridors throughout the city that connect growth areas, support business, serve transit, and increase safety. Corridors connect destinations and include identifying parallel options. This policy includes developing street typologies and updating functional classification.



- **CC2 - People-Based Metrics:** Plan, design, and evaluate projects and developments using people-focused metrics that prioritize person throughput, safety and comfort. Use the metrics to evaluate facility performance and post-project evaluations. This policy includes traffic analysis, multimodal concurrency standards, and TIP prioritization based on based on equity, safety, climate, and transportation choice.
- **CC3 - Street Standards:** Adopt street standards that create comfortable, inviting multimodal streets. Use NACTO standards as primary guidance and integrate the latest best practices from WSDOT, AASHTO, and MUTCD for facility selection and design, traffic control, and signage and striping. This policy includes access management standards, connectivity standards to improve pedestrian and small mobility safety and accessibility, and pedestrian crossing policy (Make crossings plentiful, convenient, and safe).
- **CC4 - Vision Zero:** Adopt a Vision Zero policy committing to end traffic fatalities and serious injuries on Vancouver streets by 2040. This policy would be a resolution to address the intersecting factors that lead to fatal crashes, such as unsafe behavior, alcohol and drug impairment, street design, and traffic speeds. This policy includes lower posted speeds, citywide safety program, identifying high-crash corridors, pedestrian-scale lighting, and quick build programs, among others.
- **T1 - Access to Transit:** Prioritize sidewalk and crosswalk gaps adjacent to transit stops, particularly along equity routes. Identify first/last mile barriers to major transit stops and address on a rolling basis.
- **LS 1 - Low-Stress Bicycle and Small Mobility Network:** Adopt a citywide low-stress network for BSM and walking and rolling, complemented by policies and programming that further incentivize use of the networks. Target a density of low-stress facilities every half-mile.
- **LS2 - Pedestrian Priority Streets:** Adopt a network of streets where safety and comfort for people walking and rolling is prioritized. Assign categories (primary, secondary) based on the roadway classification, level of demand, and existing and planned land uses. Use these categories to recommend desired facilities and amenities (shade, lighting, seating, etc.).
- **LS3 - Active Transportation Navigation:** This policy includes wayfinding and bicycle/small mobility parking.
- **G2 - Citywide Parking Policy and Code:** Update parking code and policies to right-size the amount of parking developed with future growth and create safe streets, compact urban form, and encourage non-driving forms of transportation.
- **F5 - Emerging Mobility:** Update City policies for how shared mobility and emerging mobility vendors shall operate in Vancouver. Create data standards, data sharing agreements, and vendor requirements. Integrate equity through reduced costs for people with low incomes. This policy includes mobility hubs, small mobility and scooter share, and mobility as a service.
- **F6 - Curb Management:** Develop policies and programs that efficiently manage valuable curb space, recognizing how changing travel patterns have placed high demands on this resource.